UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,679	04/20/2001	Gary J. Sullivan	MS1-601US	1812

22801 7590 10/05/2007

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER	
CZEKAJ, DAVID J	
ART UNIT	**PAPER NUMBER**
2621	

MAIL DATE	DELIVERY MODE
10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/839,679
Filing Date: April 20, 2001
Appellant(s): SULLIVAN, GARY J.

Rich Bucher
Reg. No. 57, 971
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/25/07 appealing from the Office action mailed 1/24/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,744,742	MacInnis et al.	6-2004
6,539,059	Sriram et al.	3-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 10 and 11 are rejected under 35 U.S.C. 101 because the claims do not meet the 35 U.S.C. 101 requirements (the claims have improper language regarding the Computer-readable media). Please see the USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" Annex IV in the Computer-Related Nonstatutory Subject Matter section. The examiner suggests changing media in claim 10, to memory media and changing more processors in claim 11 to more computers.

2. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacInnis et al. (6744472), (hereinafter referred to as "MacInnis") in view of Sriram et al. (6539059), (hereinafter referred to as "Sriram").

Regarding claims 1-2, 10-12, and 24-25, MacInnis discloses an apparatus that relates to an integrated circuit graphics display system (MacInnis: column 1, lines 41-43). This apparatus comprises "receiving a command from a decoder application" (MacInnis: figure 2, item 50, wherein the decoder application is the video decoder) and "generating one or more filter control command data structures recognizable by a communicatively coupled accelerator including one or more parameters which affect one or more filter settings of the accelerator" (MacInnis: figure 2, column 57, lines 21-37, wherein the filter parameters are the blending, scaling, blitting, and filling, the accelerator is the graphics accelerator). Although MacInnis fails to explicitly show an application interface in MacInnis's figures, the examiner notes that the system depicted

in figure 1 would require an interface to correctly operate. MacInnis further fails to show the API configured to facilitate the use of a plurality of accelerators. Sriram teaches that there is a need for an efficiently scalable decoder which facilitates efficiency, synchronization, flexibility and functionality (Sriram: column 2, lines 59-64). To help alleviate this problem, Sriram discloses an API that "is configured to facilitate the use of a plurality of different multimedia accelerators with the decoder application" (Sriram: column 4, lines 48-54, wherein the accelerators are the sub-processors; column 7, lines 10-14, column 8, lines 1-14, wherein the interface or API is the monitor processor) and Therefore, the combined teaching of MacInnis and Sriram as a whole would have rendered obvious to one having ordinary skill in the art at the time the invention was made to implement an API configuration taught by Sriram in order to obtain an apparatus that is more versatile by being able to correctly and effectively facilitate the use between multiple processors of a system.

Regarding claims 3, and 20, MacInnis discloses "the filter is a post-processing filter" (MacInnis: figure 28).

Regarding claim 4, MacInnis discloses "output data subsequent to the application of a post-processing filter are used as prediction references" (MacInnis: column 3, lines 54-55, wherein prediction references are well known within the MPEG environment).

Regarding claims 5, 14, and 21, MacInnis discloses "the post processing filter is a de-ringing filter" (MacInnis: column 9, lines 52-58, wherein low pass filtering requires the signal to be de-rung).

Regarding claims 6-7, 17, and 23, MacInnis discloses "the parameters include

a strength parameter" (MacInnis: column 4, lines 40-51, wherein the strength parameter is the scaling).

Regarding claims 8-9, 15-16, and 22, MacInnis discloses "the API issues control commands for 4 or 16 luminance structures and/or 2, 4, 8, 16, or 32 chrominance structures" (MacInnis: column 9, lines 34-44, wherein the YUV converter uses the above chrominance and luminance structures).

Regarding claim 13, MacInnis discloses "the filter control structures effect one or more of the post processing filters" (MacInnis: figure 2, column 57, lines 21-37, wherein the filter structures indicate whether to blend, scale, blitte, and/or fill).

Regarding claim 18, note the examiners rejection for claim 1, and in addition, Sriram discloses "wherein the decoder application is configured to iteratively issue configuration commands reflecting various decoding acceleration capabilities until choosing one that is acceptable to both the decoder and accelerator" (Sriram: column 5, lines 58-67, column 12, lines 59-63, wherein the configuration commands is the parameter passing).

Regarding claim 19, MacInnis in view of Sriram disclose "one ore more media accelerators coupled to the decoder application via the API" (MacInnis: figures 1-2, wherein the accelerator is the graphics accelerator, the decoder application is the video decoder; Sriram: column 7, lines 10-14, column 8, lines 1-14).

(10) Response to Argument

i. On pages 6-7, appellant argues that the 35 USC 101 rejections for claims 10 and 11 fail because the Office has failed to establish a prima facie case of unpatentability.

The Office has indicated in the rejection that the language regarding the computer readable medium was not correct and further suggested language to overcome the rejection. Hence, the Office has established a prima face case of unpatentability. Further, a computer-readable medium encoded with (stored thereon, embedded with or embodying) a computer program, should be recited in the claim in order to be considered statutory. Linking words such as including, comprising, listing and having, are not acceptable as a substitute term for encoded with.

ii. On pages 8-9, appellant argues that MacInnis fails to disclose one or more parameters, which when received by the accelerator, affects one or more filter settings of the accelerator based, at least in part, of the content of the received command.

MacInnis discloses in column 57, lines 20-35, different types of filtering. The filtering MacInnis discloses is the flipping, warping, blending, scaling, blitting, and filling. By performing a blending, scaling, filling, ect., MacInnis is performing known functions of a filter, that is, they are modifying the appearance of the image. MacInnis further discloses in column 4, lines 29-35, that a decoder digitizes and processes input video to produce internal YUV component signals. MacInnis discloses in column 57, lines 46-55, the accelerator uses these signals, or commands, to perform vector type operations. Further, the claim language does not recite the commands from the decoder must be directly sent to the accelerator. The commands are first sent to the API in which the API will process the commands and send another set of different commands to the

accelerator. Therefore, all commands received by the accelerator will be based in part from the original commands since the original commands are used at the API to generate different commands. Hence, MacInnis discloses one or more parameters, which when received by the accelerator, affects one or more filter settings of the accelerator based, at least in part, of the content of the received command.

iii. On pages 10-11, appellant argues that Sriram does not disclose an API that is configured to facilitate the use of a plurality of different accelerators with the decoder application.

Appellant discloses in paragraph 0033 of the specification that an accelerator performs computationally intensive operations such as the IDCT. Sriram discloses in column 4, lines 49-53, performing dedicated signal processing tasks using multiple sub-processors or accelerators. These sub-processors perform the IDCT operations. Hence, Sriram discloses the use of a plurality of different accelerators with the decoder application.

iii. On page 11, appellant argues that combining MacInnis with Sriram would render MacInnis unsatisfactory for its intended purpose.

MacInnis discloses in column 3, lines 49-54, receiving input signals such as analog signals and digital signals. MacInnis further discloses in column 4, lines 29-31 digitizing and processing the analog input video. Since the analog video is processed into a digital form, the combination of MacInnis with the digital data of Sriram would not render MacInnis unsatisfactory for its intended purpose.

iv. On page 12, appellant argues that MacInnis fails to disclose the post-processing filter.

MacInnis illustrates in figure 28 different filtering operations such as blending. MacInnis further discloses in column 44, lines 23-37, the blending is performed with an output of the graphics pipeline. Since the blending is performed with the output of the graphics pipeline, the filtering operation, or blending, is done in a post-processing step.

v. On page 12, appellant argues that Richter fails to disclose the subject matter of claim 4.

MacInnis, not Richter, was relied upon to teach the subject matter of claim 4. MacInnis discloses in column 3, lines 54-55 the use of the MPEG standard. The examiner notes that prediction references are well known within the MPEG standard.

vi. On pages 12-13, appellant argues that MacInnis fails to disclose a strength parameter.

MacInnis discloses in column 4, lines 40-51, the use of a scaling factor, or strength parameter. The scaling factor adjusts, or strengthens, data from values of less than one up to a factor of 4. Hence, MacInnis discloses a strength parameter

vii. On page 19, appellant agues that Sriram fails to disclose iteratively issuing configuration commands reflecting various alternative degrees and methods of

decoding acceleration capability until choosing one that is acceptable to both the decoder application and the accelerator.

Sriram discloses in column 5, line 58 – column 6, line 30, the process of argument passing. Argument passing is performed so that all data needed at a particular level is accessible to that level. Therefore the commands, or requests, are iteratively received/sent for data so the decoder and accelerator can perform the necessary processing. Hence, Sriram discloses iteratively issuing configuration commands reflecting various alternative degrees and methods of decoding acceleration capability until choosing one that is acceptable to both the decoder application and the accelerator

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

(12) Evidence Appendix

No evidence has been submitted by appellant.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Dave Czekaj

Conferees:

Mehrdad Dastouri, SPE

Thai Tran, SPE

MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600

THAI Q. TRAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600